

REMARKS

Claims 1, 3-7, 9 and 11 are pending in this application, of which claims 1 and 11 have been amended. No new claims have been added.

Claims 1, 3-5, 9 and 11 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent 6,459,533 to Clapp et al. (hereinafter "**Clapp et al.**") in view of **Kamei et al.** (previously applied).

Applicants respectfully traverse this rejection.

Clapp et al. discloses an optical waveguide format tuneable optical filter formed using Bragg grating reflectors to define one or more optical cavities of a Fabry P rot etalon, each cavity of the etalon including one or more slots 18 containing a controllable refractive index medium, for instance a silicone gel whose index is regulated by Joule heating strips 19, or a polymer dispersed liquid crystal whose index is electric field regulated. Strong coupling coefficient (\sim a few tens mm^{-1}) gratings may be made using lithography to form linear arrays of buried high index inclusions extending along the waveguide core axis.

Kamei et al. has been cited for teaching lens-shaped or wedge-shaped groove structures.

Neither of the cited references teaches, mentions or suggests the use of temperature control with a heater electrode interposed between a plurality of lens-shaped groove structures for controlling a divergence angle of the propagating light, as disclosed in paragraph [0030] of the specification of the instant application. Accordingly, claim 1 has been amended to clarify this distinction.

Neither of the cited references teaches, mentions or suggests the use of temperature control with a heater electrode interposed between a plurality of wedge-shaped groove structures for controlling a guide direction of light, as disclosed in paragraph [0038] of the specification of the instant application. Accordingly, claim 11 has been amended to clarify this distinction.

Furthermore, it should be noted that paragraph [0054] of Kamei et al. discloses "it is important...to eliminate the temperature control by using the technique for athermalizing the transmission wavelength," and, therefore, teaches away from the temperature control claimed in the instant application.

Thus, the 35 U.S.C. §103(a) rejection should be withdrawn.

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as unpatentable over Clapp et al., Kamei et al. and further in view of Kurokawa et al.

Applicants respectfully traverse this rejection.

Kurokawa et al. has been cited for teaching the dispersion compensation circuit comprising the optical functional waveguide according to claim 6 but, like the other cited references, fails to teach, mention or suggest the features recited in claim 1, as amended, from which claims 6 and 7 depend.

Thus, the 35 U.S.C. §103(a) rejection should be withdrawn.


In view of the aforementioned amendments and accompanying remarks, claims 1, 3-7, 9 and 11, as amended, are in condition for allowance, which action at an early date, is required.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: July 1, 2009

CUSTOMER NO.: 21874

Respectfully submitted,

By 

William L. Brooks
Registration No.: 34,129
EDWARDS ANGELL PALMER & DODGE
LLP
P.O. Box 55874
Boston, Massachusetts 02205
(202) 478-7376
Attorneys/Agents For Applicant